

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (Currently Amended) Catalyst consisting of nanoparticles, said nanoparticles comprising:
  - a metal core containing at least one platinoid or an alloy of a platinoid,
  - a first organic coating formed from molecules attached to the surface of the metal core, and
  - a second organic coating formed from molecules different from the molecules of the first organic coating, and which are grafted onto molecules of the first organic coating,  
wherein the molecules of the second organic coating are residues of a compound chosen from monocyclic and polycyclic anhydrides.
2. (Previously Presented) Catalyst according to Claim 1, in which the metal core of the nanoparticles consists of platinum, a platinum alloy or a mixture of the two.
3. (Previously Presented) Catalyst according to Claim 1 or Claim 2, in which the molecules of the first organic coating are residues of compounds comprising at least two chemical functions including a first function for attaching them to the surface of the metal core, and a second function for grafting them with the molecules of the second organic coating.
4. (Canceled)
5. (Previously Presented) Catalyst according to Claim 1, in which the molecules of the first organic coating are capable of degrading at the surface of the metal core when they are not grafted with molecules of the second organic coating.

6. (Previously Presented) Catalyst according to Claim 5, in which the molecules of the first organic coating are 4-mercaptoaniline residues.

7. (Currently Amended) Catalyst according to Claim 1, in which, ~~the nanoparticles being made by means of a process comprising a reaction for grafting the compounds intended to form the molecules of the second organic coating onto the molecules of the first organic coating,~~ the proportion of molecules of the first organic coating onto which are grafted the molecules of the second organic coating is less than 100% ~~after this reaction.~~

8. (Previously Presented) Catalyst according to Claim 1, in which the thickness formed by the two organic coatings does not exceed about 10 nm.

9. (Canceled)

10. (Currently Amended) Catalyst according to Claim ~~[[9]]~~ 1, in which the molecules of the second organic coating are residues of compounds chosen from thiophene acid chloride, glutaric anhydride, sulfobenzoic anhydride, diphenic anhydride, tetrafluorophthalic anhydride, tetraphenylphthalic anhydride and diphenylmaleic anhydride.

11. (Currently Amended) Catalyst according to Claim 1, in which the nanoparticles are from about 1.5 to 10 nm in diameter ~~and preferably from about 1.5 to 5 nm in diameter.~~

12. (Currently Amended) Catalyst according to Claim 1, ~~which comprises the nanoparticles~~ wherein the catalyst is in suspension in a solvent.

13. (Currently Amended) Catalyst according to Claim 12, in which the ~~nanoparticle~~ suspension has a nanoparticle concentration of from 0.3 to 1 mg/ml.

14. (Currently Amended) Catalyst according to Claim 1, in which the nanoparticles are in the form of a ~~[[thin]]~~ film, deposited onto the surface of a support.

15. (Previously Presented) Catalyst according to Claim 14, in which the support is a carbon nanotube.

16. (Currently Amended) Catalyst according to Claim 1, in which the nanoparticles are ~~subjected to a pretreatment~~ immersed in a basic medium before use.

17. (Currently Amended) Catalyst according to Claim 16, in which ~~the pretreatment of the nanoparticles consists in immersing them~~ are immersed in a solution of a strong base.

18. (Currently Amended) Catalyst according to Claim 1, ~~which~~ wherein the catalyst is an electrocatalyst.

19. (Currently Amended) Catalyst according to Claim 18, ~~which~~ wherein the catalyst is used in a device for producing electrical energy.

20. (Currently Amended) Catalyst according to Claim 19, ~~which~~ wherein the catalyst is used in a fuel cell.

21. (Currently Amended) Catalyst according to Claim 18, ~~which~~ wherein the catalyst is used in a system for detecting or assaying one or more chemical or biological species, ~~in particular a sensor or a multisensor~~.

22. (Currently Amended) Device for producing electrical energy, ~~which~~ wherein the device comprises ~~nanoparticles~~ the catalyst as defined in claim 1.

23. (Currently Amended) Device according to Claim 22, ~~which~~ wherein the device is a fuel cell.

24. (Original) Nanoparticle comprising:

- a metal core containing at least one platinoid or an alloy of a platinoid,

- a first organic coating formed from molecules attached to the surface of the metal core, and
- a second organic coating formed from molecules different from the molecules of the first organic coating, and which are grafted onto molecules of the first organic coating, in which the molecules of the second organic coating are residues of a compound chosen from monocyclic and polycyclic anhydrides.

25. (Original) Nanoparticle according to Claim 24, in which the molecules forming the second organic coating are residues of a compound chosen from glutaric anhydride, sulfobenzoic anhydride, diphenic anhydride, tetrafluorophthalic anhydride, tetraphenylphthalic anhydride and diphenylmaleic anhydride.

26. (Previously Presented) Nanoparticle according to Claim 24, in which the metal core consists of platinum, a platinum alloy or a mixture of the two.

27. (Previously Presented) Nanoparticle according to Claim 24, in which the molecules of the first organic coating are 4-mercaptoaniline residues.

28. (Currently Amended) Nanoparticle according to Claim 24, ~~which~~ wherein the nanoparticle is from about 1.5 to 10 nm in diameter and ~~preferably from about 1.5 to 5 nm in diameter.~~

29. (New) Catalyst according to Claim 11, in which the nanoparticles are from about 1.5 to 5 nm in diameter.

30. (New) Catalyst according to Claim 21, wherein the catalyst is used in a sensor or a multisensor.

31. (New) Nanoparticle according to Claim 28, wherein the nanoparticle is from about 1.5 to 5 nm in diameter.